Renewable Energy in California:

Implementing the Governors Renewable Energy Executive Order

Renewable Energy Action Team
Desert Renewable Energy Conservation Plan
STARTING POINT

DRECP Independent Science Panel
April 22, 2010
Ontario, California

California Energy Commission

Department of Fish and Game

Fish and Wildlife Service

Bureau of Land Management

Renewable Energy Action Team
Biological Sensitivity Mapping

The identification of Renewable Energy Study Areas and Conservation Opportunity Areas is preliminary.

– They represent a starting point for discussion among the California Desert Renewable Energy Conservation Plan (DRECP) stakeholders and participants.

– They are not an interim or final designation by the REAT agencies.

–They are intended to foster the deliberative process that will eventually lead to designation of conservation and renewable energy development areas.

Renewable Energy Action Team
Biological Sensitivity Mapping

The identification of Renewable Energy Study Areas and Conservation Opportunity Areas is preliminary.

– Primarily an analysis of biological information.

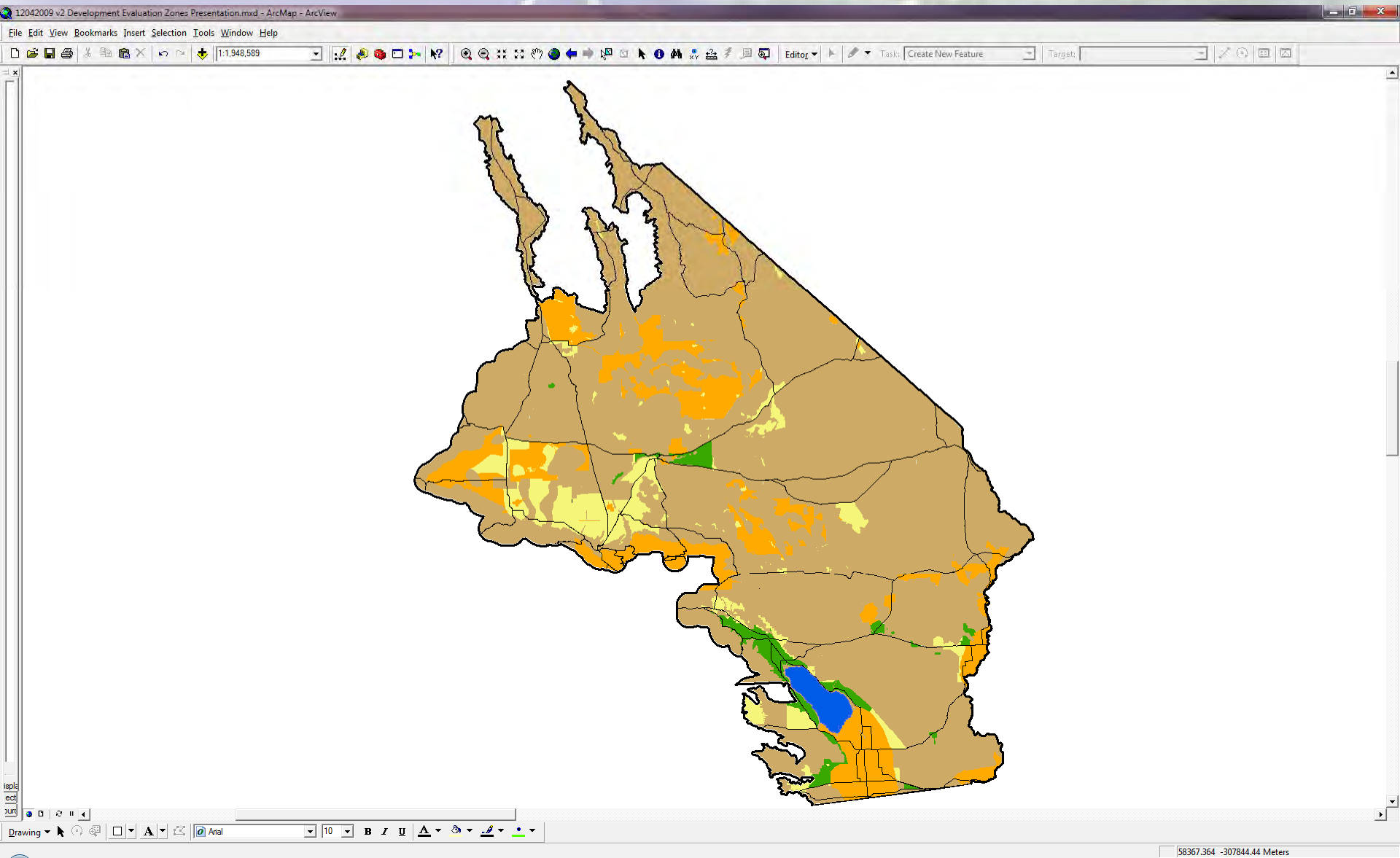
– Reflect the REAT Agencies analysis of best available data relating to potential renewable energy development zones and conservation areas.

– With input from the science advisors and stakeholders, the potential zones will be further evaluated and become part of the emerging conservation strategy.

Renewable Energy Action Team
Biological Sensitivity Mapping

- Assemble, Review, and Evaluate Existing Biological Information.
- Identified Areas to Evaluate and Refine during the DRECP Planning Process, bases on sensitivity analysis and best professional judgment.
- Areas will be reshaped, added, or removed through the planning process.

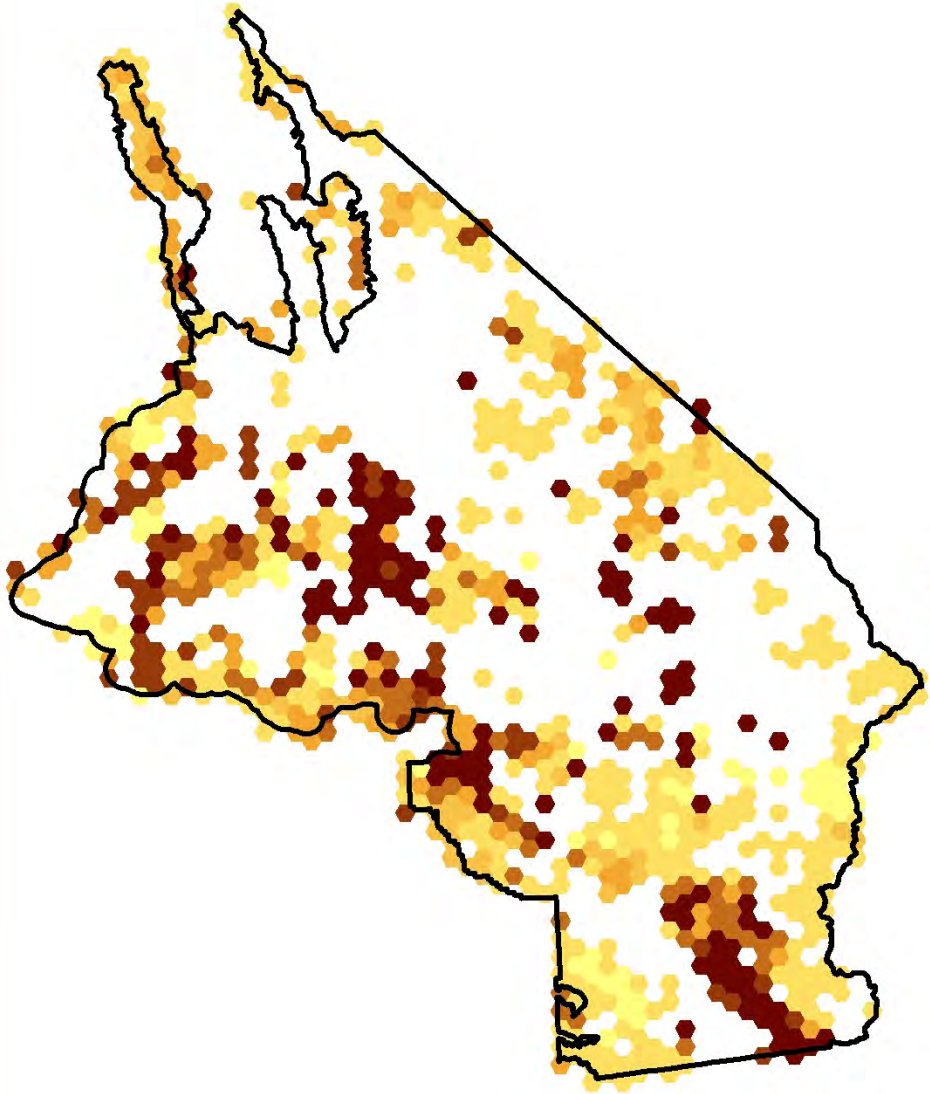
Regional Biological Sensitivity



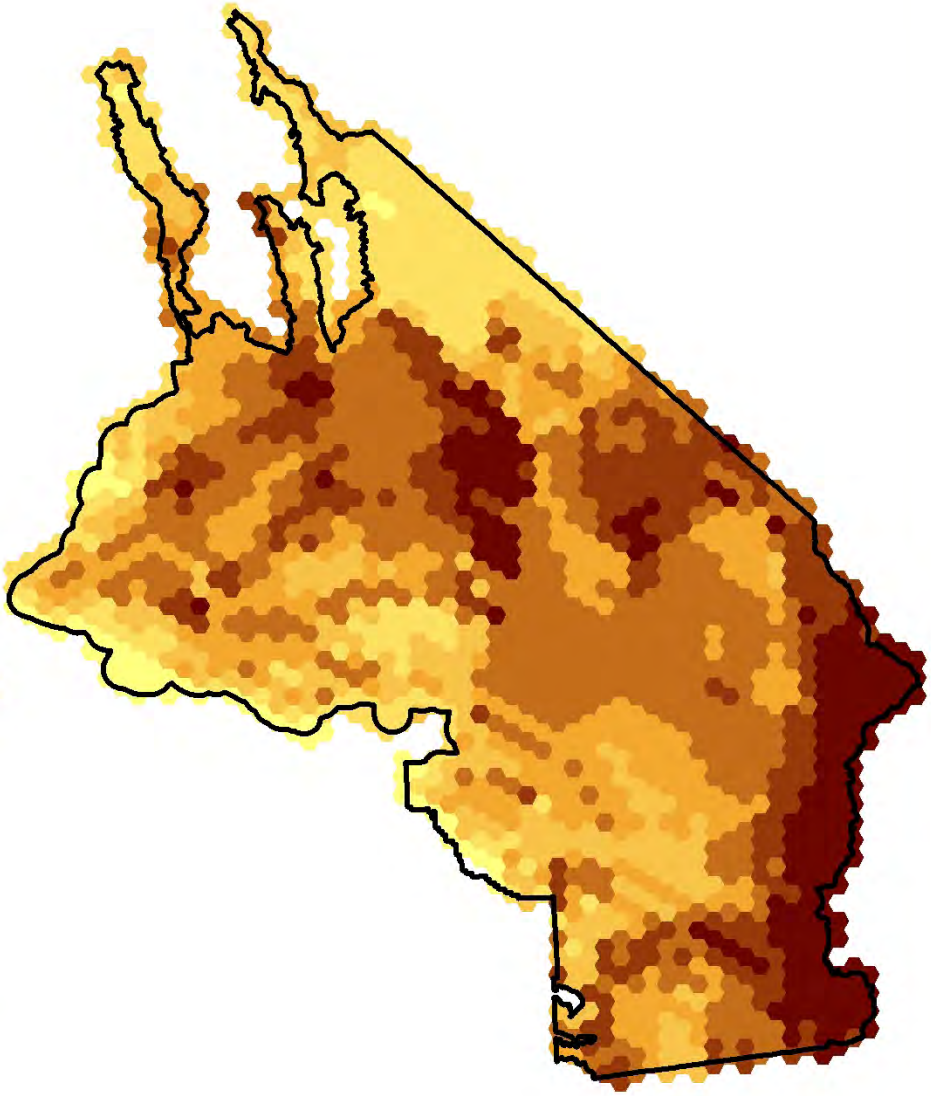
Species Sensitivity Ranking

- Sensitive species rankings were created by assigning a score to each 25 sq. mile grid cell within the DRECP Planning Area
- Each species was then assigned a score based on selected criteria
- The final maps depict the normalized sum of all species and the species scores for each hex grid

SPECIES SENSITIVITY RANKING



PLANTS



WILDLIFE

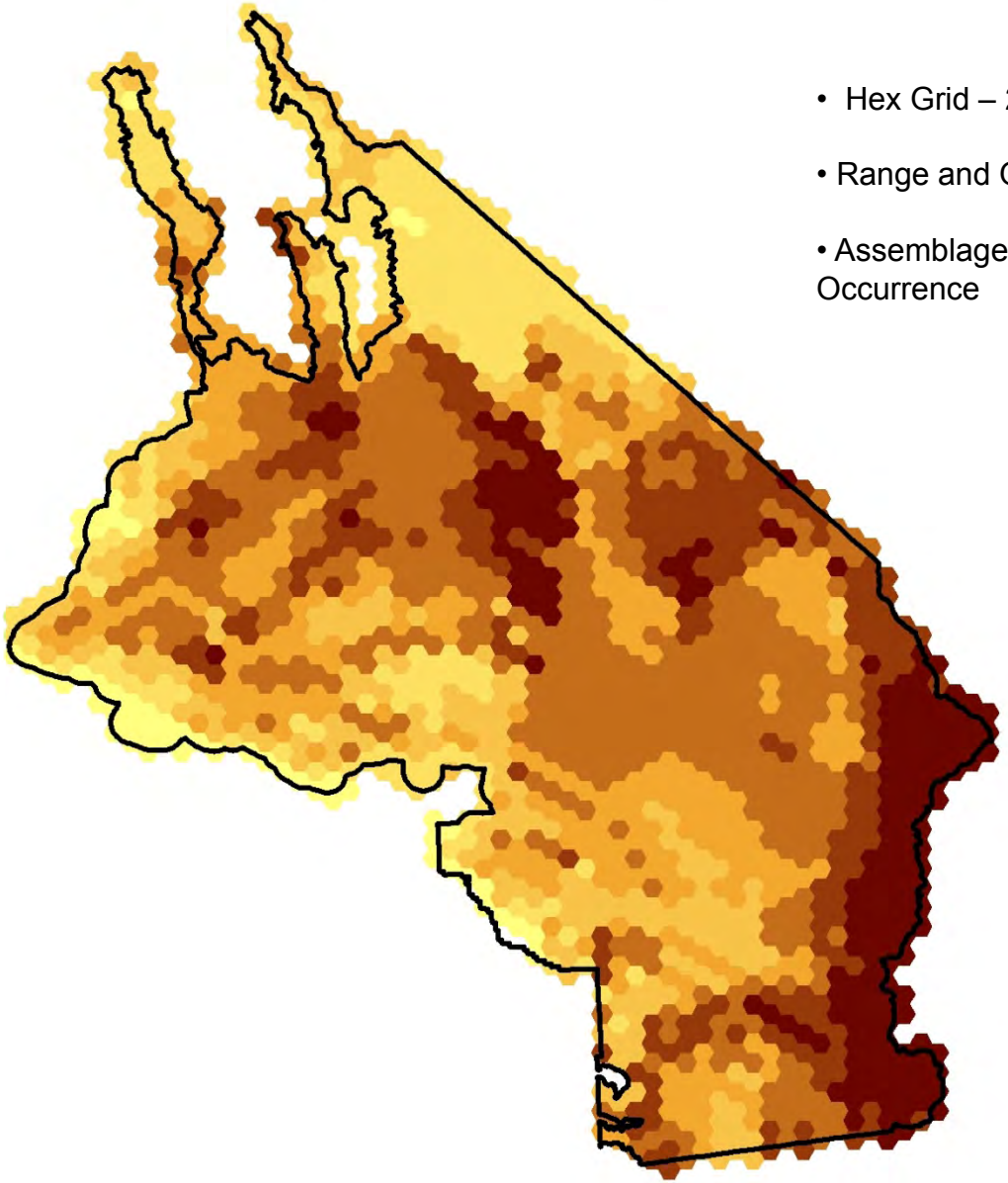
*The darker the color the higher the sensitivity.

Species Sensitivity Ranking - Wildlife

- For wildlife species, range maps and with occurrence data were combined so that every cell is assigned a total number of sensitive species

- Wildlife Species Ranking Criteria
  - Listing Status
  - Special Status
  - Percentage of Range in Planning Area
  - Population Status
  - Vulnerability

WILDLIFE SENSITIVITY RANKING



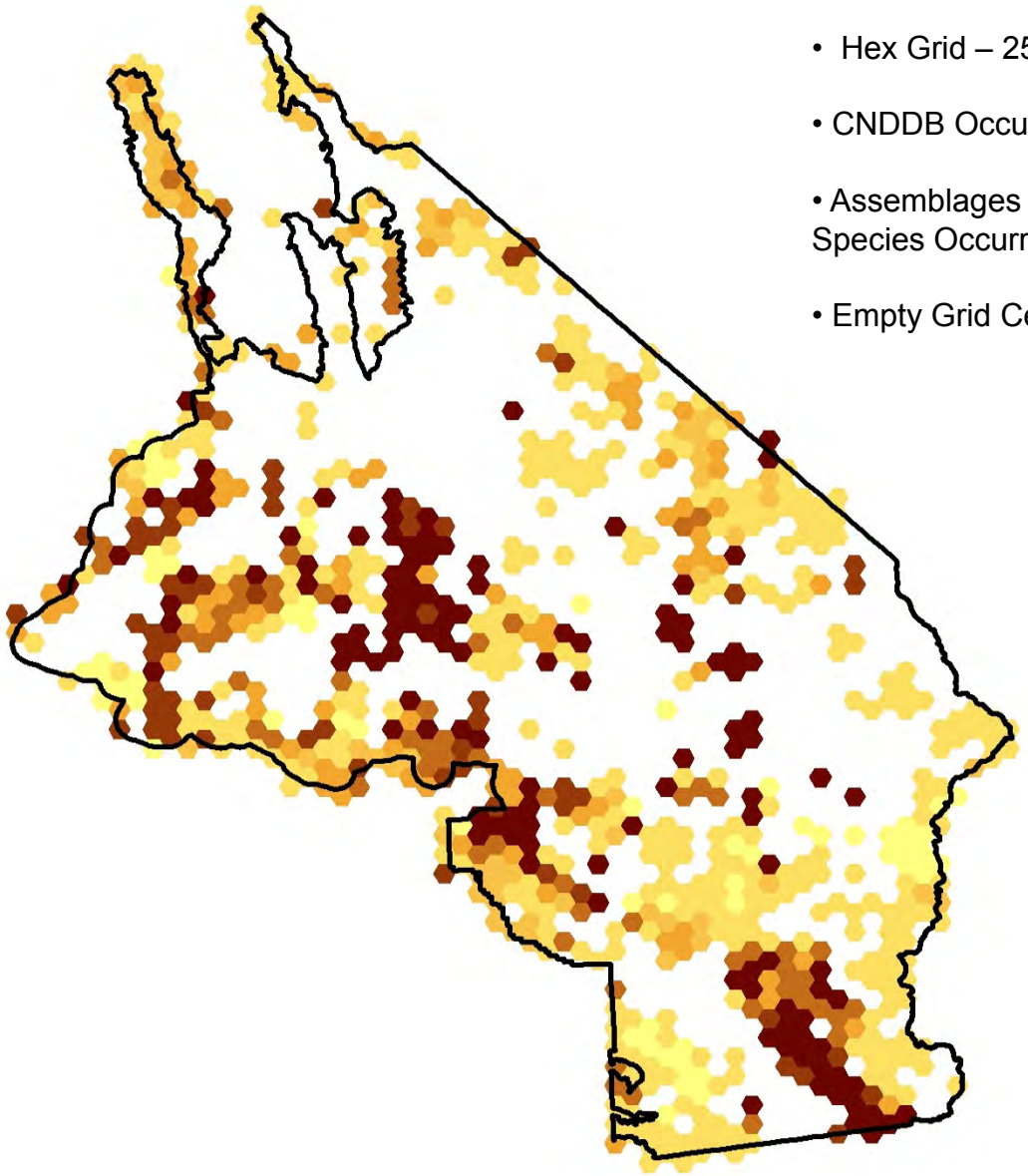
- Hex Grid – 25 mi^2
- Range and Occurrence Data
- Assemblages of Sensitive Species Occurrence

***The darker the color the higher the sensitivity.**

Species Sensitivity Ranking - Plants

- For plant species only occurrence data were available. Cells with plan occurrences are assigned a total number of sensitive species.
- Occurrence data is positive siting only, empty cells indicate that no data is available. Plants do not have range maps available.
- Plant Species Ranking Criteria
  - Listing Status
  - Special Status
  - Heritage Methodology State Ranks (S1, S2)
  - CNPS List Status

PLANT SENSITIVITY RANKING



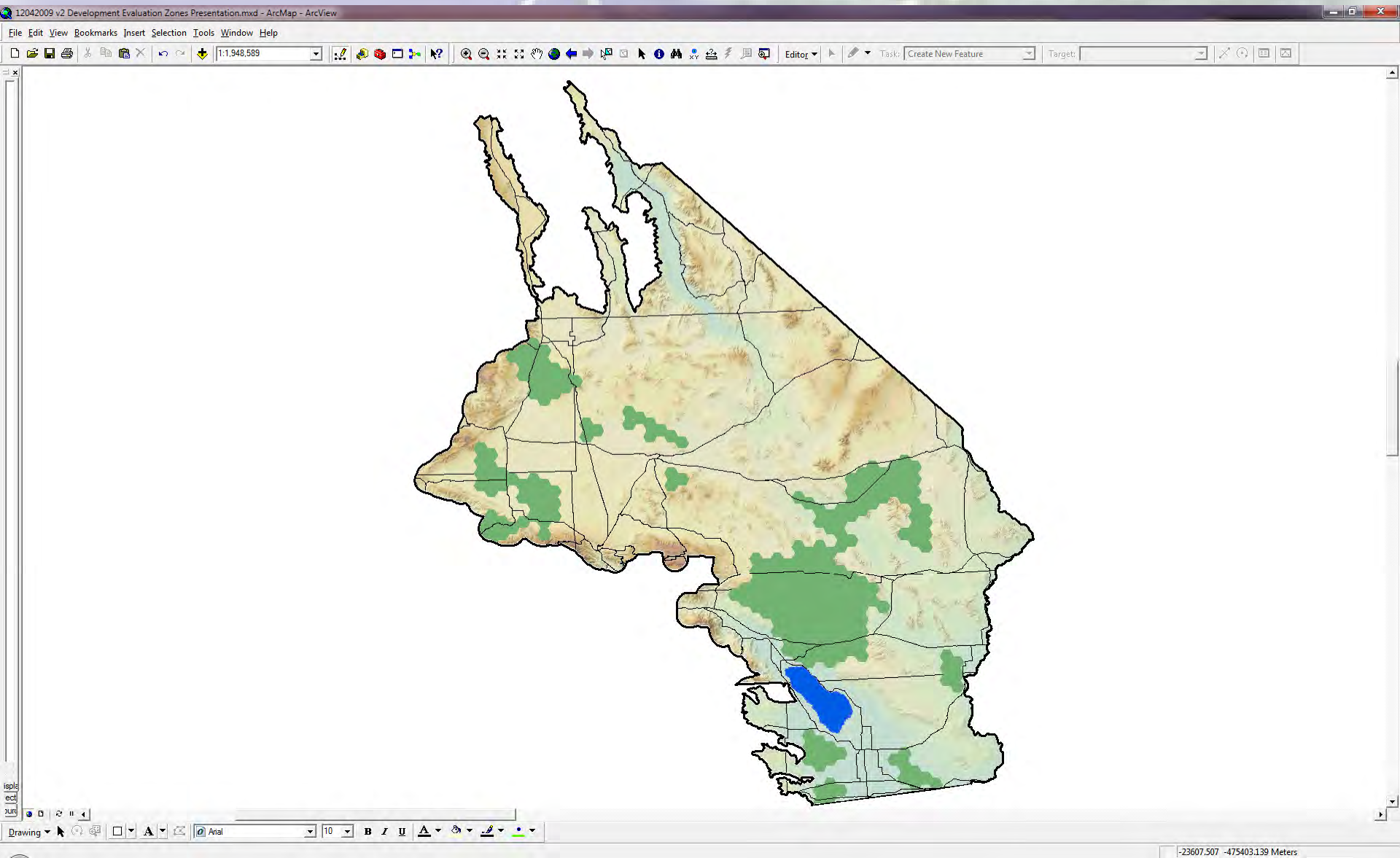
- Hex Grid – 25 mi^2
- CNDDB Occurrence Data
- Assemblages of Sensitive Plant Species Occurrence
- Empty Grid Cells – No data

***The darker the color the higher the sensitivity.**

Conservation Opportunity Areas

- Areas with High Biological Value
  - Core population areas
  - Connectivity between populations and habitats
- Land acquisition or habitat enhancement on public lands encouraged within these zones
- Development not precluded
  - Complex permitting process
  - Increased mitigation obligation

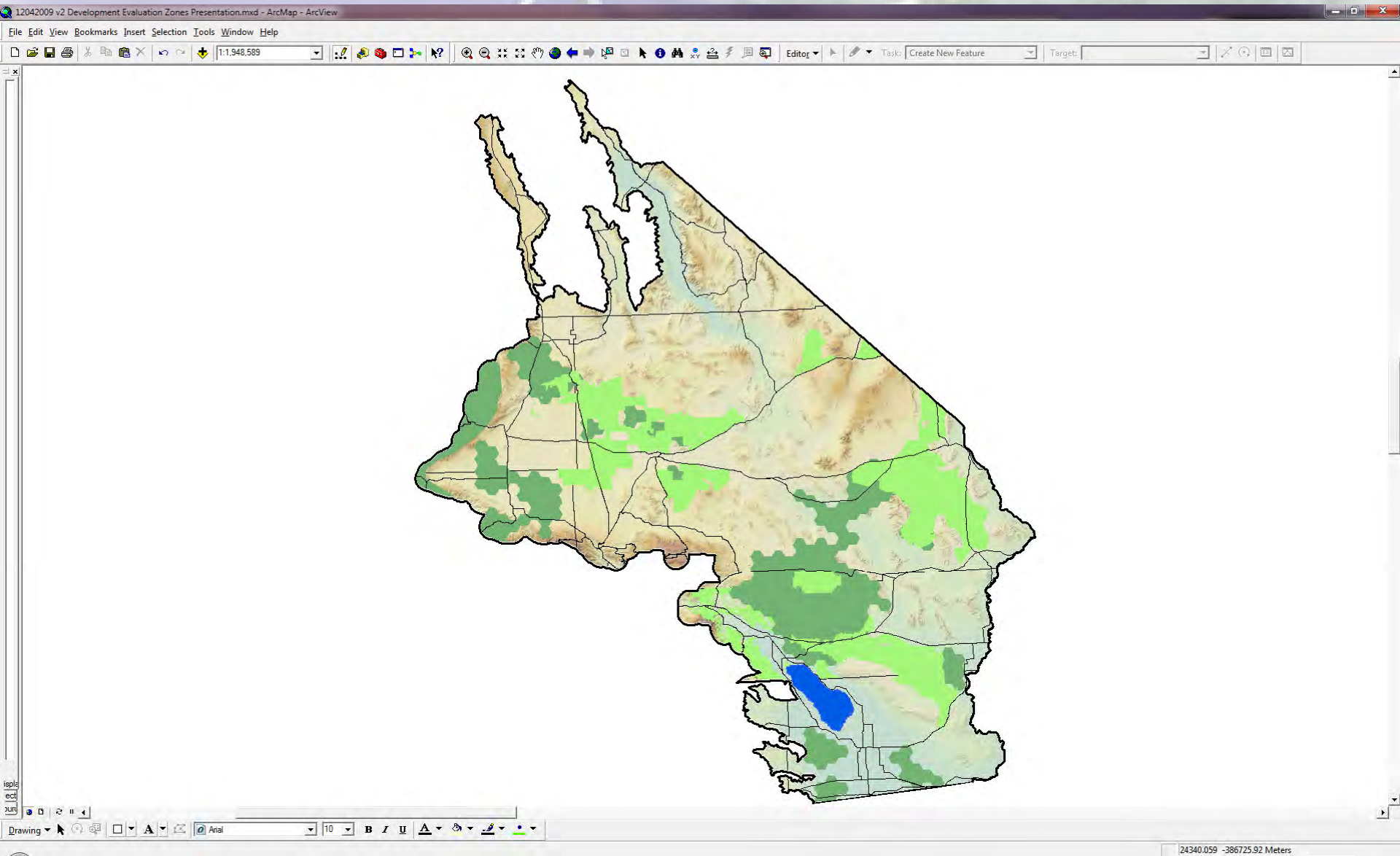
Desert Renewable Energy Conservation Plan (DRECP)
Conservation Opportunity - Identification



Conservation Opportunity Areas

- Areas Identified as Potential Acquisition
  - Add-on to adjacent Protected Areas, Infill
  - Targeted for Habitat Connectivity
- Areas of Public Lands with Identified Management Opportunities
  - BLM Desert Wildlife Management Areas (DWMA)
  - BLM Areas of Critical Environmental Concern (ACEC)
  - DFG Mitigation Lands
  - Potentially – Other Private Conservation Lands (Third Party Conservation Partners)
  - National Park Lands
- Other Existing Conservation Areas
  - Wilderness Areas
- Proposed National Monuments

Conservation Opportunity - Identification



Conservation Opportunity Areas

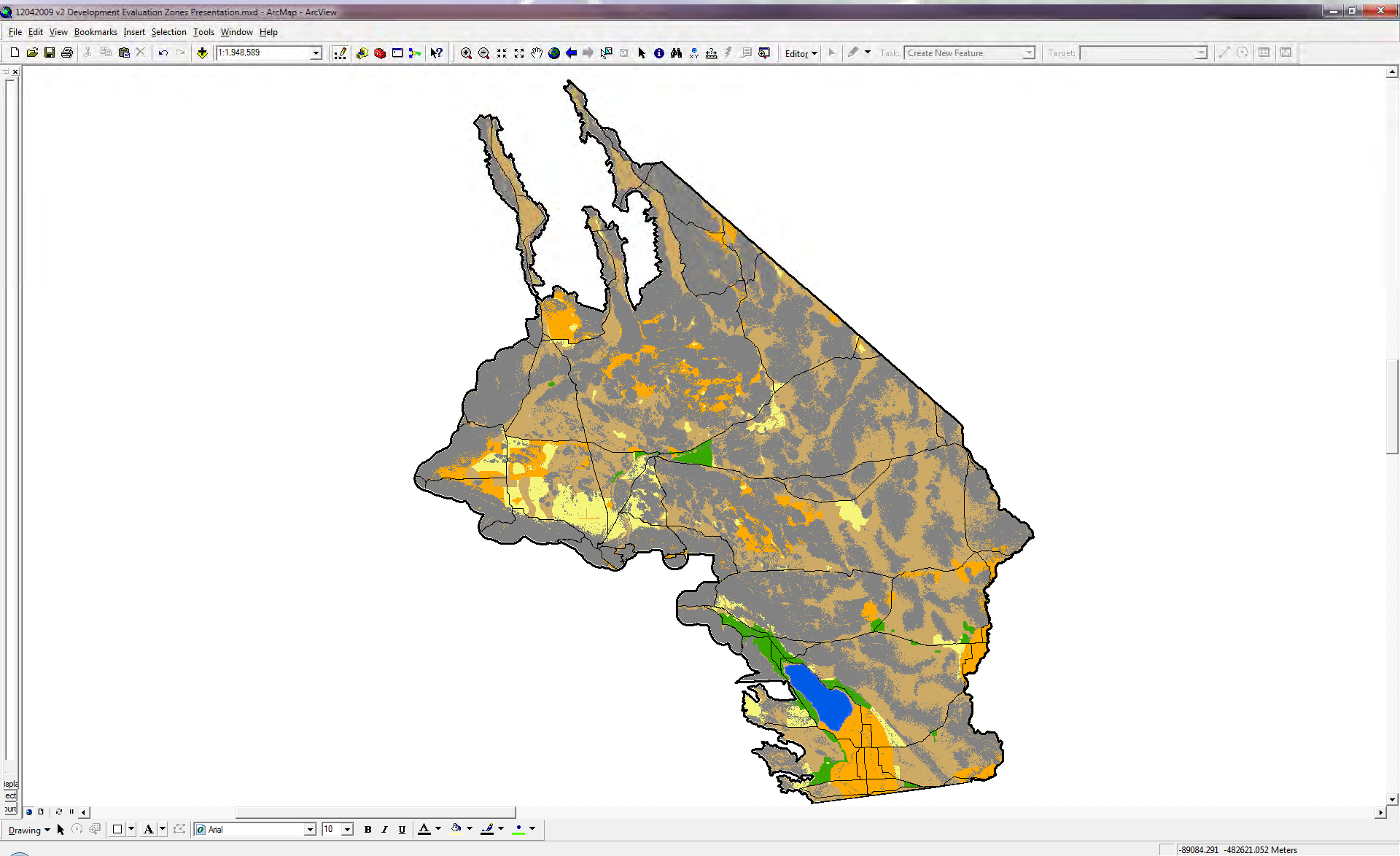
- Further Study in the Desert Renewable Energy Conservation Plan (DRECP) Planning Process

- Areas identified in the Final DRECP
  - Reserve system for long-term species conservation
  - Expedite project mitigation solutions
  - Partnerships for Conservation

Renewable Energy Study Areas

- Identified as potential study areas for utility-scale renewable energy development
- Based on biological sensitivity
  - Areas of moderate or low sensitivity
  - Areas of unknown sensitivity
- Further Study in the Desert Renewable Energy Conservation Plan (DRECP) Planning Process

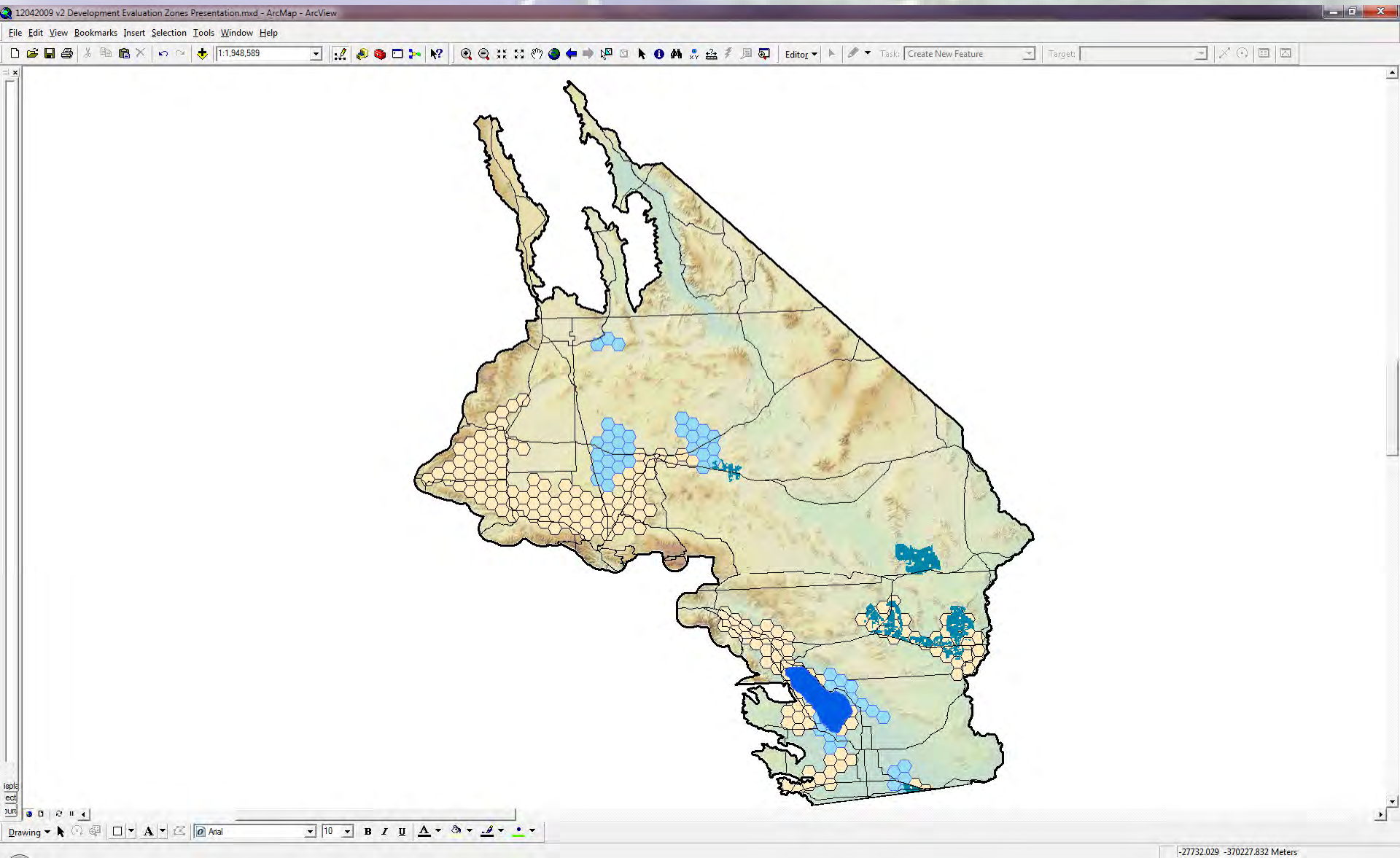
Solar Development
Technical Constraint – 2% Slope



BLM Solar Study Areas

- Identified as potential areas for utility-scale solar development
- Chosen using a number of criteria
  - Quality of solar resource
  - Slope
  - Proximity to roads and transmission
  - Conservation value of the land
- Further Study in the Solar Energy Development Programmatic Environmental Impact Statement (Solar PEIS)

Renewable Energy Study Areas - Identification



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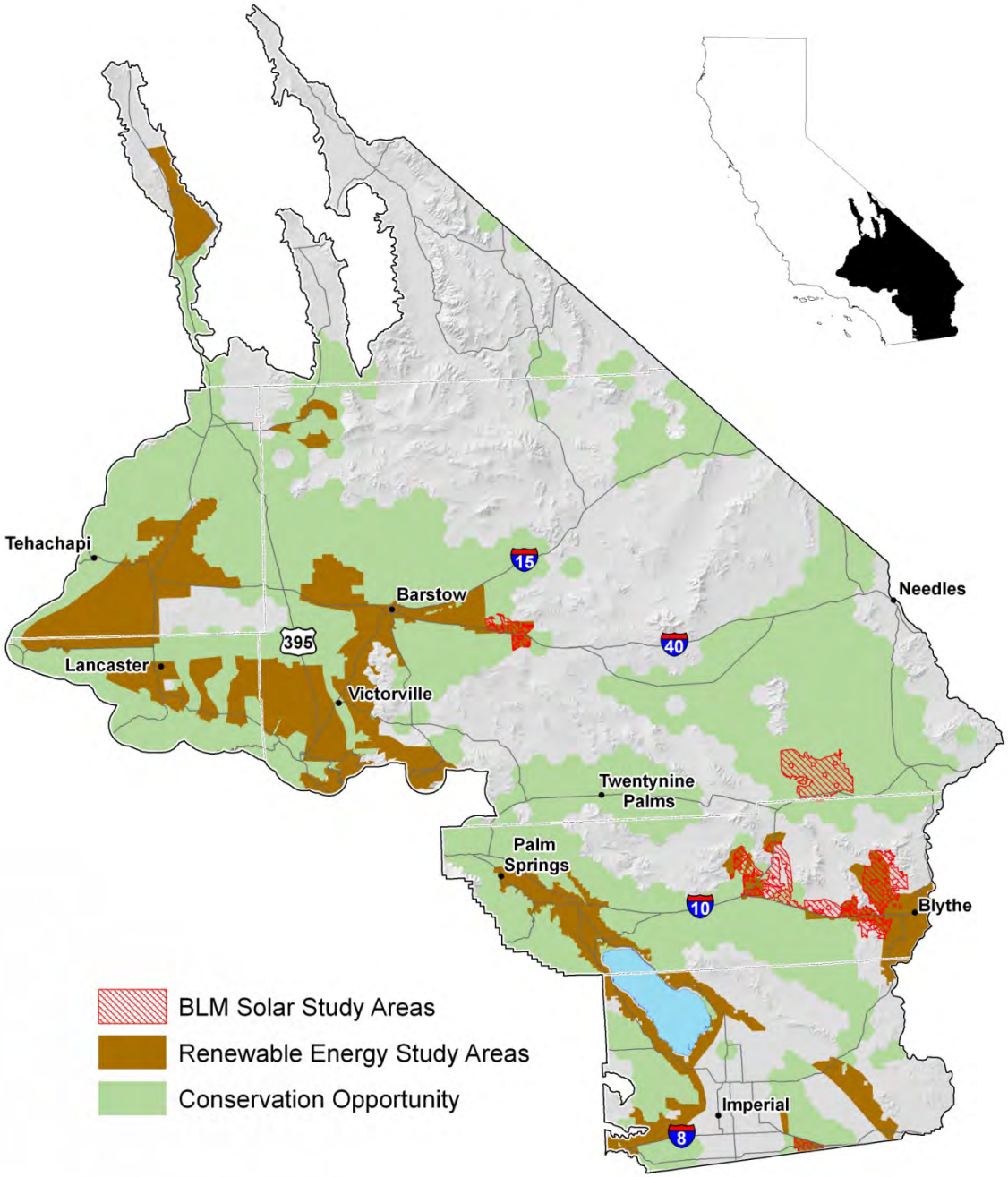
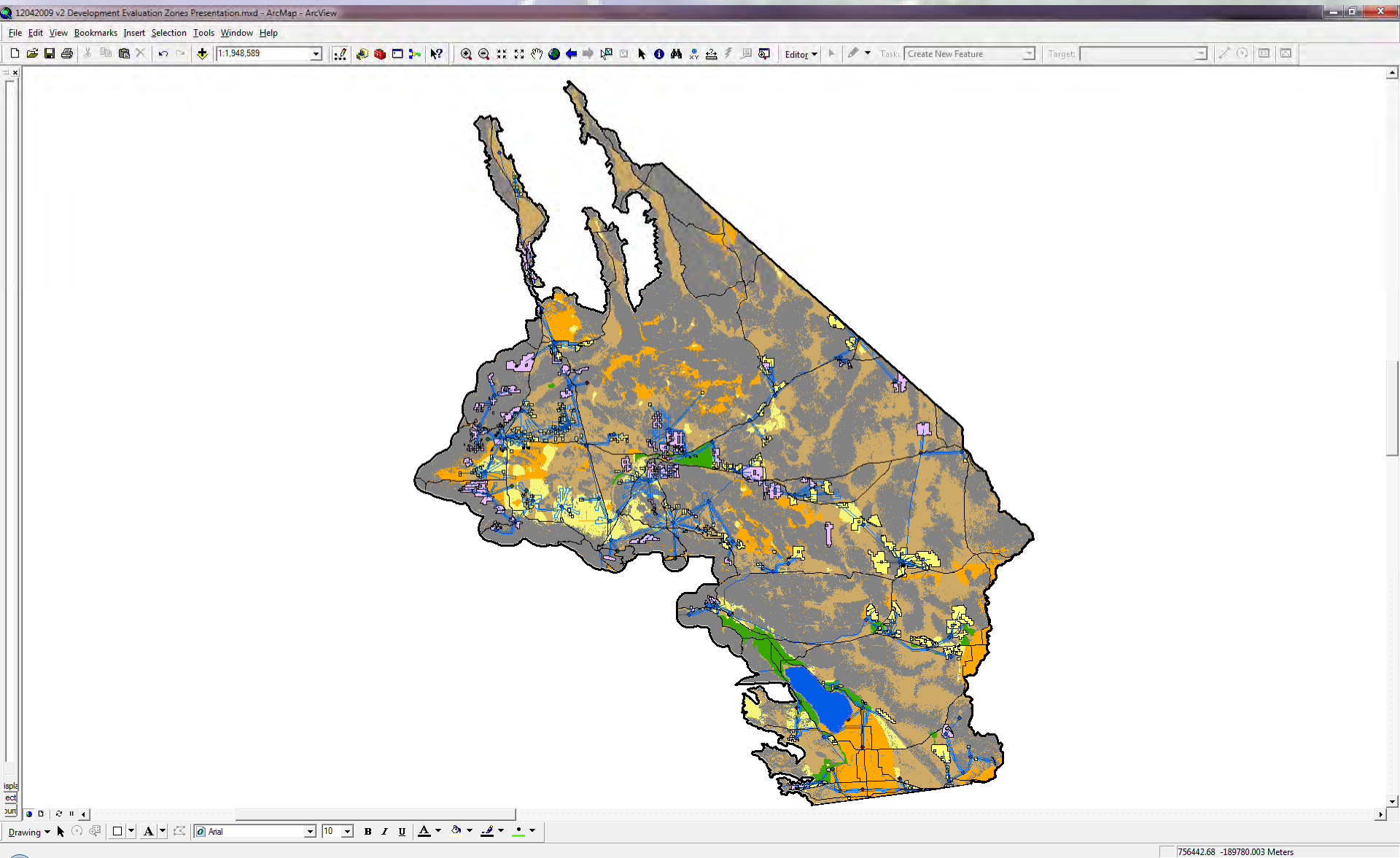


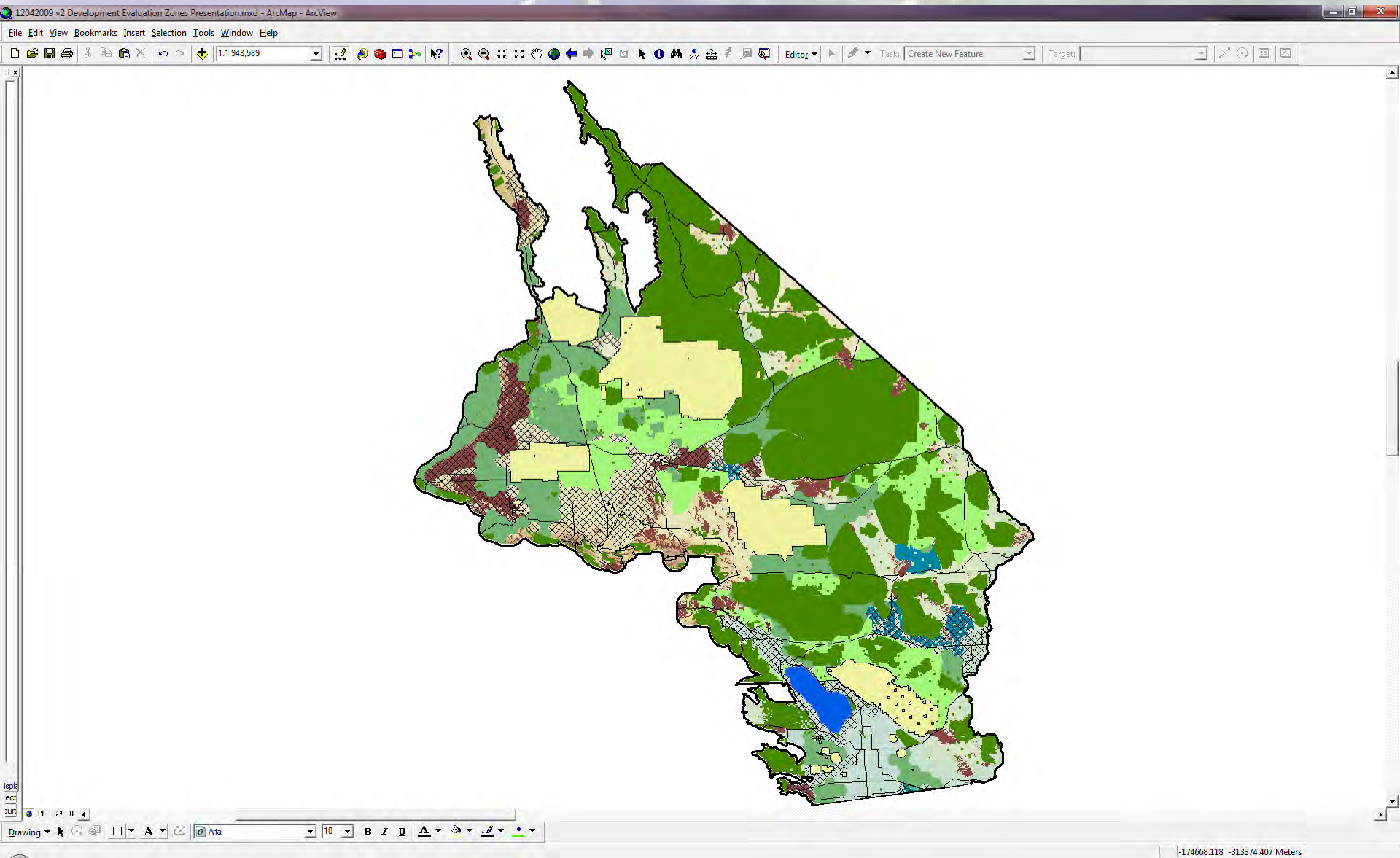
Renewable Energy Study Areas

- Land ownership, availability planning zoning not examined
- Archaeological, visual, recreational resources not evaluated
- Further Study in the Desert Renewable Energy Conservation Plan (DRECP) Planning Process
- Areas selected in the Final DRECP would provide expedited permitting process for renewable energy projects

Renewable Energy Transmission Initiative (RETI) Phase 2



DRAFT Development/Conservation Strategy Map - Wind



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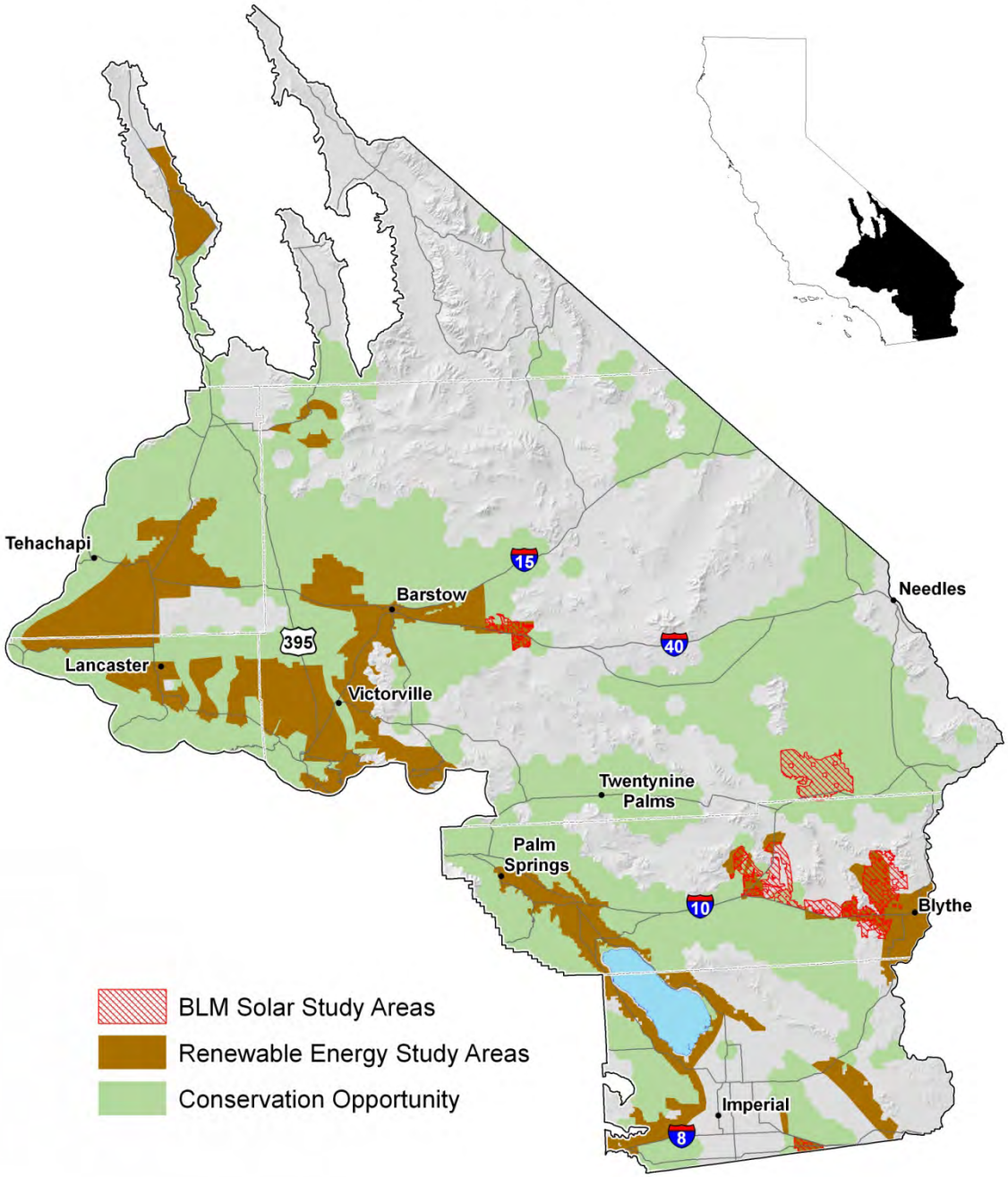

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